Staff Workshop on the Preparation of the 2010 Bioenergy Action Plan
June 3, 2010
Attachment A- Questions for Public Comment

Panel 1: Getting new biopower generation on the grid

1. What actions can agencies do to best address the following barriers to bringing new biopower generation on-line?
    a. Difficulties in obtaining reliable and affordable feedstock materials.
    b. Lack of commercialization of emerging technologies (not commercially or economically viable).
    c. High cost of pollution control equipment and advanced small-scale generation technologies needed to meet BACT requirements.
    d. Lengthy permitting and interconnection requirements due in part to the following:
        i. No current multimedia approach to environmental regulation
        ii. Multiple permitting requirements, permit timeframes
        iii. Costly interconnections paid by generators and not subsidized by general ratepayers
        iv. Prioritizing interconnection services by utilities
    e. Difficulties in obtaining financing; inadequate incentives.
2. What statutory changes may be needed?
3. What indicators, such as megawatt-hours, should be used to measure progress bringing new biopower generation on-line?
    a. Gross generation (MWhs) instead of a percentage of total load?

Panel 2: Opportunities for mixed-use and mixed-fuel bioenergy facilities

1. What actions can agencies do to support the development of mixed-use and mixed-fuel bioenergy facilities?
    a. Co-digestion:
        i. Other than the programmatic EIRs currently under development, are there additional opportunities available to streamline the permitting process for anaerobic digestion facilities at wastewater treatment plants or other locations using mixed fuels, such as food processor waste, restaurant leftovers, and dairy manure?
        ii. What policies can best advance commercialization of co-digestion technologies?
        iii. What information is publically available regarding location, volume, quality, and seasonality of biodegradable waste suitable for co-digestion at wastewater treatment plants?
        iv. What financing programs are available to fund the near-term potential of combined heat and power systems that use biogas at wastewater facilities? Are additional financing programs needed to further develop co-digestion infrastructure, generation, and emission control equipment?
    b. Co-firing
        i. Two coal fired electricity generation facilities in California are currently co-firing with biomass, and plan a full fuel switch in the near future. Can this be replicated at other in-state coal-fired generation facilities?
    c. Co-location
        i. What policies can best advance co-locating bioenergy facilities to take advantage of opportunities to use the waste of one process as a fuel source for another?
        ii. What combinations provide the greatest potential synergistic benefits?

2. What indicators, such as megawatt-hours, should be used to measure progress in developing these facilities?

Panel 3: Increasing production of biogas in California for transportation and power production

1. What actions can agencies do to best address the following barriers to bringing new biogas production facilities to California?
    a. Difficulties in obtaining reliable and affordable feedstock materials.
    b. Lack of commercialization of emerging technologies (not commercially or economically viable).
    c. High cost of biogas clean-up equipment for pipeline injection, and high cost of pipeline interconnection.
    d. Conflicting regulations, permitting issues due in part to the following:
        i. No current multimedia approach to environmental regulation
        ii. Multiple permitting requirements, permit timeframes
        iii. Costly interconnections paid by generators and not subsidized by general ratepayers
        iv. Prioritizing interconnection services by utilities
    e. Conflicting gas quality standards that constrain biogas development
        v. Established gas quality standards continue to evolve .
        vi. Are gas quality standards imposed by vehicle manufacturers specifications?
    f. Difficulties in obtaining financing; inadequate incentives.
2. What biogas-to-electricity conversion or combustion technologies are available to meet California's air quality standards? Are these technologies commercially or economically viable?
3. What indicators, such as cubic feet of gas, should be used to measure progress bringing new biogas production facilities to California?
4. What statutory changes may be needed?

Panel 4: Increasing production of transportation biofuel in California

1. What actions can agencies do to best address the following barriers to bringing new biofuel production facilities to California?
    a. Difficulties in obtaining reliable and affordable feedstock materials.
    b. Lack of commercialization of emerging technologies such as cellulosic ethanol.
    c. Conflicting regulations, and permitting issues that constrain biofuel development.
    d. Difficulties in obtaining financing.
2. Are there additional barriers to increasing production of biofuels in California?
3. What indicators, such as gallons per year, should be used to measure progress bringing new biofuel production facilities to California?